# Suzanne Arlie Park Master Plan

# BACKGROUND AND PRELIMINARY SITE OVERVIEW



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DRAFT
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# **Table of Contents**

Section 1: Introduction, Purpose, and Background	1
1.1 Introduction	1
1.2 A Vision for Suzanne Arlie Park	
1.3 Master Plan Purpose and Timeframe	
1.4 Acquisition History and Landscape Context	
1.5 Policy Direction and Related Plans, Reports, and Inventories	
1.7 Master Plan Summary (brief summary of what is being proposed)	
Section 2: Site History and Current Conditions	
2.1 Historical Context	8
2.1.1 Native American Influences and Cultural Significance	8
2.1.4 Settlement History and Structures	8
2.2 Landform and Hydrology	11
2.2.1 Topography	11
2.2.2 Geological Features	12
2.2.3 Soils	13
2.2.4 Surface Hydrology and Wetlands	14
2.3 Vegetation and Wildlife	16
2.3.1 Historical Vegetation Patterns	16
2.3.2 Interpretation of Historical Aerial Photos	17
2.3.3 Existing Vegetation Communities	18
2.3.4 Ecological Significance	24
2.3.5 Rare and Uncommon Plant Communities	25
2.3.6 Invasive Exotic Vegetation	25
2.3.7 Observed Wildlife	25
2.3.7 Unique Habitat Features	26
2.4 Planning Context and Easements	27
2.4.2 Planning Context and Lane County Zoning	27
2.4.1 Easements	27
2.5 Access, Roads, and Utilities	29
2.5.1 Roads and Access Points	29
2.6.3 Utilities	30
2.6 Recently Completed Site Management Actions	30
Sections Below to be Completed in Summer/Fall 2016	31
Section 3: Site Opportunities, Constraints, and Priorities	31
Section 4: Vision, Goals, and Recommended Actions	32

4.1 Desired Future Conditions	32
4.2 Zones of Use and Siting Criteria	32
4.2.1 Siting Criteria Facilities Trails (e.g. views, loop options, variety)	33
4.2.2 Siting Criteria for Facilities (e.g. access, visual quality, limit habitat impacts)	33
4.3 Goals and Recommended Actions	33
4.3.1 Habitat (management, restoration, and enhancements)	33
4.3.2 Access and Maintenance	33
4.3.3 Recreational Trails	33
4.3.4 Facilities for Recreation and Education	33
4.3.5 Visual Quality	33
4.3.6 Other	34
Section 5: Master Plan Elements and Prioritization	35
5.1 Proposed Master Plan Elements	35
5.2 Prioritization and Implementation	
Figures	
Figure 1-1: Site Context Map	3
Figure 1-2: Acquisition History Map	
Figure 1-3: Suzanne Arlie Park Context Perspective	
Figure 1-4: Related Plans and Reports	
Figure 2-1: Existing Conditions Map	
Figure 2-2: Geological Map Units	12
Figure 2-3: Geology Map	12
Figure 2-4: Soil Types	13
Figure 2-5: Soils Map	14
Figure 2-6: Historical Vegetation Map	16
Figure 2-7: 1936 Aerial Photo	17
Figure 2-8: Existing Vegetation Communities and Cover	19
Figure 2-9: Existing Vegetation Map	23
Figure 2-10: Synthesis Conservation Opportunities Area Map	
Figure 2-11: Zoning and Planning Boundaries Map	
Figure 2-12: Easements Map	28

# **Appendices**

- A. Historical Aerial Photos
- B. Habitat Assessment Report

## Section 1: Introduction, Purpose, and Background

#### 1.1 Introduction

Susanne Arlie Park is situated to the south and east of the Eugene city limits and was acquired by the City of Eugene (City) in two separate land transactions in 2008 and 2011, utilizing funds raised primarily through the 2006 voter approved Parks, Recreation, and Open Space Bond Measure. At 515 acres, Suzanne Arlie Park is the largest single park in the City's system and was acquired with a purpose of accommodating the planned eastward extension of the Ridgeline Trail network, conserving the high value habitats found on the site, and accommodating a wide range of nature-based recreational activities and facilities in the future.

Other than the existing gravel roads crossing the site, there are currently no facilities or formal trails at Suzanne Arlie Park and the park receives few visitors. Since acquiring the land, the City has primarily focused on management efforts related to invasive species control, improvements for maintenance access, debris removal, installation of boundary markers, and fuel reduction efforts to lower the risk of wildfire. In 2010, the City completed the *Eastern Ridgeline Extension Master Plan* and an associated habitat inventory covering the original 200-acre acquisition area. Since the size of the park has now more than doubled, this 2010 Master Plan is outdated and will be replaced by this Master Plan once completed. Content from the 2010 Master Plan will be incorporated into this plan where applicable.



Suzanne Arlie Park contains significant areas of high value habitat including oak woodland pictured above.

#### 1.2 A Vision for Suzanne Arlie Park

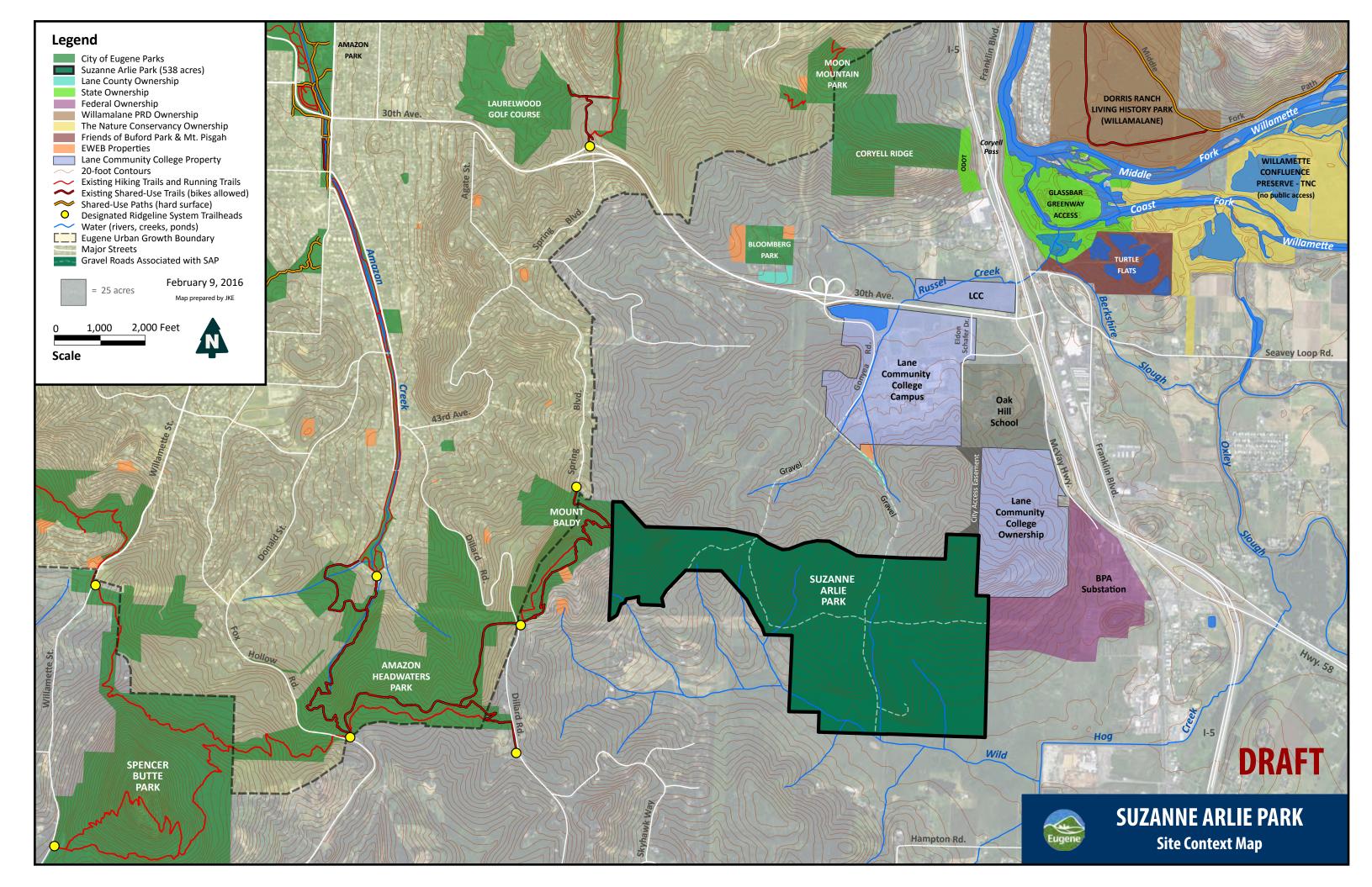
The following is a draft long-term vision for Suzanne Arlie Park which will be refined based on input received from the public, interest groups, and regional partners.

#### A Vision for Suzanne Arlie Park

Suzanne Arlie Park provides an expansive beautiful nature park where Eugene's children, families, and adults enrich their lives through safe, fun, and challenging connections to a local healthy natural environment. The rich mosaic of habitats found within the park, including significant patches of regionally rare prairie, wetland, savanna, and oak woodland will be conserved, restored, and managed to benefit an array of native plant and animal species. With the implementation of the Master Plan, the park will accommodate a critical two-mile segment of the Ridgeline Trail and serve as a major hub for compatible nature-based recreation and outdoor education. A network of interconnected trails will serve a variety of user groups, providing multiple loop options of varying lengths and challenges. The park will serve as an oasis for people and wildlife alike and provide opportunities for visitors to refresh their minds, bodies, and spirits, all within close proximity to the urban environment. Views and vistas to the surrounding landscape and the native ecosystems found throughout the park will provide an outstanding experience for park visitors and remind them of the beauty and uniqueness of the southern Willamette Valley.



Park visitors contemplate the beauty and potential of Suzanne Arlie Park. A planned Ridgeline Trail extension through the park will connect Spencer Butte (seen in the distance) all the way thru to Lane Community College and eventually further east to Mount Pisgah.



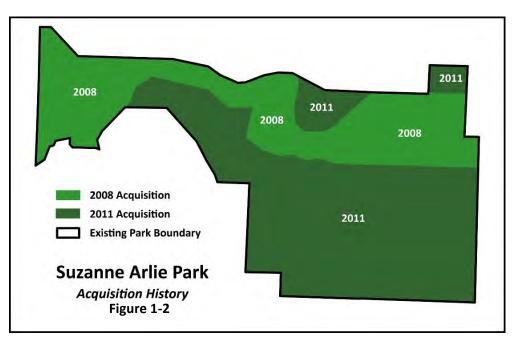
#### 1.3 Master Plan Purpose and Timeframe

The content of Suzanne Arlie Park Master Plan is based on direction provided by numerous existing related plans and studies (see Section 1.6), evaluation of site opportunities and constraints, public desires expressed through general public involvement, input of key community stakeholders, and City staff and consultant expertise. The Master Plan is intended to provide a vision which will guide decisions and priorities relating to access, recreational development, and habitat management within the park over a **20-year timeframe**. Additionally it is hoped that the plan will raise public awareness of and interest in the park, provide guidance to balance multiple interests, and help support funding applications for future development and management of the park. Proposed park improvements and management actions have been prioritized (see Section 5) based on community need, cost, and the urgency of various habitat management interventions. However, the timeline for implementation will ultimately be based on available funding and staff resources.

#### 1.4 Acquisition History and Landscape Context

The City of Eugene purchased the first 200 acres of what is today Suzanne Arlie Park from Arlie & Company in 2008. This initial acquisition extended along a relatively narrow band of ridgetop approximately two miles in length between Mount Baldy and land owned by Lane Community College.

The primary purpose of this initial acquisition was to accommodate the long-planned extension of the ridgeline trail and preserve habitat found along the corridor. In 2011, the City took advantage of an opportunity to purchase additional land from Arlie & Company and expanded the park ownership by 315 acres, making this the largest park in the



City's system at 515 acres. The additional acquisition area extended the park primarily to the south toward Wild Hog Creek with some smaller patches added along the ridge top along the northern edge. The park contains significant areas high quality oak habitat, plus a substantial area of wetland on the flatter southern edge of the property. The relatively large size of the park provides outstanding opportunities for accommodating a major new trail network, housing a range of nature-based recreational facilities, and providing a diverse outdoor classroom all within a short drive, walk, or bike of the city. Additionally, this park acquisition ensures the permanent protection of a significant patch of high value habitat on the fringe of the metro area that will function as a critical wildlife corridor between the existing ridgeline park network and the Willamette River corridor.

Wetlands

Willow Creek
Natural Area

Willow Creek
Natural Area

Willow Creek
Natural Area

Willow Creek
Natural Area

Signar

Butte
Port

Hendroo

Park

Juliamette

Spring Tello

Amazon
Ridge

Blanton
Ridge

Ridge

Blanton
Ridge

Ridge

Blanton
Ridge

Ridge

Ridge

Ridge

Spring Tello

Spring Te

Figure 1-3: Suzanne Arlie Park Context Perspective

#### 1.5 Policy Direction and Related Plans, Reports, and Inventories

A number of key plans, reports, and inventories have been conducted specifically for the area that is now Suzanne Arlie Park or provide relevant direction from a City, regional, or statewide perspective. These resources, which are itemized below, have been incorporated into the Management Plan or cited as applicable.

Figure 1-4: Related Plans and Reports

Title and Date	Relationship to the Eugene Trails Plan
City of Eugene Parks and	The planning process to develop the Parks and Recreation System Plan began
Recreation System Plan (City of	in spring 2015. The Plan will include an analysis of future park and recreation
Eugene, planning process	needs and propose system improvements to be implemented over a 10+ year
underway)	planning horizon. When completed, this system-wide plan will provide
	additional direction on park facilities, funding, and nearby acquisition targets.
Eugene Trails Plan (City of Eugene,	The ETP addresses soft-surface recreational trails and includes an evaluation
May 2016)	of the existing system, proposes nearly seventy miles of new trails, and
	contains guiding principles to direct future trail construction, priorities, and
	maintenance practices. The Plan puts an emphasis on connectivity,
	accommodating a variety of user groups through shared-use trails or trail
	corridors, and creation of multiple loop options of varying lengths. The ETP
	proposes an extensive network of interconnected trails within Suzanne Arlie
	Park (SAP) including the main Ridgeline Trail extension, shared-use trials,
	single-track mountain bike trails, pedestrian-only trails, and a nature play
	trail. Additionally, the ETP proposes that SAP be considered for
	accommodating a possible mountain bike skills park and a cyclocross track.

Title and Date	Relationship to the Eugene Trails Plan
Oregon Trails 2016: A Vision for	This 10-year plan sets statewide policy related to non-motorized trails and
the Future – 2016-2025 Oregon	includes criteria for evaluating State funding for trails projects through the
Statewide Recreational Trails Plan	Recreational Trails Program (RTP). The Plan identifies "walking/hiking" as the
(Oregon Parks and Recreation	most common non-motorized trail activity in the state by frequency (38.5%).
Department, 2016)	"Biking, single track" was listed as the sixth most common trail use by
	frequency (3.5%).
2013-2017 Statewide	The 2013-2017 SCORP is used to guide how the Oregon Parks and Recreation
Comprehensive Outdoor	Department allocates outdoor recreation funding and provides information to
Recreation Plan (Oregon Parks and	assist recreation providers throughout the state of Oregon. SCORP also
Recreation Department, 2013)	includes the results of the statewide outdoor recreation participation survey.
	"Walking on streets/sidewalks /trails/paths" was identified as the most
	popular outdoor recreational activity in Oregon by percent of population
	participating.
Eastern Ridgeline Extension	This Master Plan was developed for the initial 200-acre acquisition of what is
Master Plan (City of Eugene, 2010)	today Suzanne Arlie Park. This Plan includes goals and recommended actions
limater riam (ent) of Eugenie, 2010,	for trails, active recreation, habitat management, and maintenance. The
	Master Plan Map proposes the Ridgeline Trail extension, an additional
	network of interconnected shared-use trails, a future disc golf course, and
	maintenance access points. This Plan will be replaced by the Suzanne Arlie
	Park Master Plan when completed.
Eastern Ridgeline Extension	A habitat assessment including plant surveys, vegetation community
Habitat Assessment (Salix	mapping, and assessment of condition was conducted on the 200-acre
Associates, October 2009)	acquisition area of what is today Suzanne Arlie Park.
Ridgeline Area Open Space Vision	This vision document was developed by multiple regional partners and
and Action Plan (LCOG and	provides a framework for future park and open space planning within the 20-
Partners, 2008)	mile Ridgeline corridor extending from Fern Ridge Reservoir to Mount Pisgah.
	This report identifies the area that is now Suzanne Arlie Park as a "Key Habitat
	Area" and proposes the future extension of the Ridgeline Trail through the
	park, running from Mount Baldy toward LCC, Moon Mountain, and the
	Willamette River. The vision was endorsed by local elected officials and
	numerous interest groups.
Oregon Conservation Strategy	The Oregon Conservation Strategy was developed to provide statewide
(Oregon Department of Fish and	guidance on conservation priorities and values and identifies high priority
Wildlife, 2006)	target vegetation communities and species. High value conservation
	communities identified for the Willamette Valley include oak woodlands,
	grasslands (including savanna), wetlands, riparian, and aquatic. Several of
	these target habitats (and associated wildlife) are found in Suzanne Arlie Park.
Rivers to Ridges Metropolitan	The <i>Rivers to Ridges</i> vision was developed to provide a landscape scale
Regional Park and Open Space	framework for future park and open space planning in the Eugene-Springfield
Study (LCOG and Partners, 2003)	region. The vision defines key trail corridors in and around the metro area and
	connections to the broader regional system. The vision map depicts the
	Ridgeline corridor extending from Mount Baldy toward the Willamette River
	and Moon Mountain through what is now Suzanne Arlie Park. The vision was
	endorsed unanimously by local elected officials and numerous interest
Cultural Resource Survey of College	In 2002, a cultural resource survey was commissioned by Arlie & Company,
Park Property (Heritage Research	who at the time owned approximately 1,100 acres to the south of Lane
Associates, Inc., April 2002)	Community College including the area that is today Suzanne Arlie Park. The
, , ,	report includes an overview of the cultural history of the area and the results
	of records reviews and field surveys.
Park Property (Heritage Research	groups.  In 2002, a cultural resource survey was commissioned by Arlie & Company, who at the time owned approximately 1,100 acres to the south of Lane Community College including the area that is today Suzanne Arlie Park. The report includes an overview of the cultural history of the area and the results

1.6 Planning Process and Community Outreach
To be completed later in the planning process
4.7.Master Dier Comment (brief comment of orbit is being accord)
1.7 Master Plan Summary (brief summary of what is being proposed)
To be completed later in the planning process

# **Section 2: Site History and Current Conditions**

#### 2.1 Historical Context

#### 2.1.1 Native American Influences and Cultural Significance

Humans have occupied the Willamette Valley for many thousands of years and the echo of their long presence can still be observed at Suzanne Arlie Park. Most native inhabitants of the southern Willamette Valley belonged to the Kalapuyan family who are thought to have significantly influenced the vegetation communities by initiating frequent seasonal burning of understory vegetation to improve conditions for

hunting, gathering, and possibly travel (Johannessen, 1971). These frequent fires are believed to be the major disturbance factor that helped maintain open savanna and prairie conditions throughout much of the Willamette Valley by limiting the invasion of less fire resistant conifer species such as Douglas-fir. As Euro-American settlers moved into the valley beginning in the mid-1800s and began suppressing fires, many of the savanna and prairie dominated landscapes across the valley were gradually overtaken by conifers and other woody vegetation or converted to agricultural and urban uses. Suzanne Arlie Park is one of those increasingly rare locations in the valley where large patches of these once dominant vegetation

The Kalapuyan people are known to have used at least 50 species of plants found in prairies and savanna for food and fiber (Christy et al. 2011). The oldest archeological evidence of habitation in Willamette Valley have been found in the form of camas ovens and charred camas bulbs dating back to 7,750 years (Sultany et al., 2007).

communities still exist, although in a degraded condition. Sadly, much of the Native American population had been decimated by disease when early settlers arrived, so little recorded information exists about how humans specifically interacted with the land and what significance the area that is today Suzanne Arlie Park might have had to these people.

Some direct evidence of Native American presence in the area of Suzanne Arlie Park does however exist in the form of two concentrations of chert and obsidian flakes (known as lithic scatters) that were documented just outside of what is today the park boundary during a cultural resource survey of the area that was conducted by Heritage Resource Associates, Inc. in 2002. The exact location of these finds are not included in this plan in order to help protect the resource from possible disturbance. The cultural survey team noted that access to much of the area now contained within Suzanne Arlie Park was not possible due to poor ground visibility from thick vegetation, so it's quite possible that additional evidence of Native American presence could be observed in the future. Archeological surveys will be conducted prior to any major future ground disturbing activities in the park.

#### 2.1.4 Settlement History and Structures

Based on the findings of a 2002 Cultural Resource Survey (CRS) conducted by Heritage Research Associates, Inc. along with aerial photo interpretation and on-the-ground observations, several structures and their out-buildings are known to have occupied the area now contained within the park boundary and two located immediately adjacent. Most of these structures seem to have been oriented around homesteading and agricultural uses (see section 2.3.2 for detail on historical aerial photo interpretation). All put one structure (a pump house) are now gone.

The oldest structure know to have existed on the site is noted on the 1853 GLO survey with the name "S. Sovern" and was located on the southwest flank of the small hill located on the south side of the park

(referred to as Severin Ridge). An 1861 GLO land survey for the area indicates ownership in that same area by "Silas Severin" (different spelling or individual than indicated on the 1853 survey). No remains of this structure are obvious in that location today. Another homestead was located along the north-south road. Based on findings from the CRS, the homestead was likely occupied beginning in the 1920s. A grove of trees marks that spot in the 1936 aerial photo and it is possible that the house is still standing at that time, but obscured by the trees on the photo. Further research would be needed to determine the original homesteader's name and date of occupation and eventual abandonment. All that remains of that homestead today is a brick and stone hearth, a low stone wall, a stock



Remains of a 1920s-era homestead

pond, and a small outbuilding which is thought to either a cellar building or pumphouse. Another 1920s era house with outbuildings was located just to the southwest of the park property and was accessed by the road that currently parallels Wild Hog Creek. All that remains of this homestead is a small lap-sided

pumphouse which is located just onto the park property.



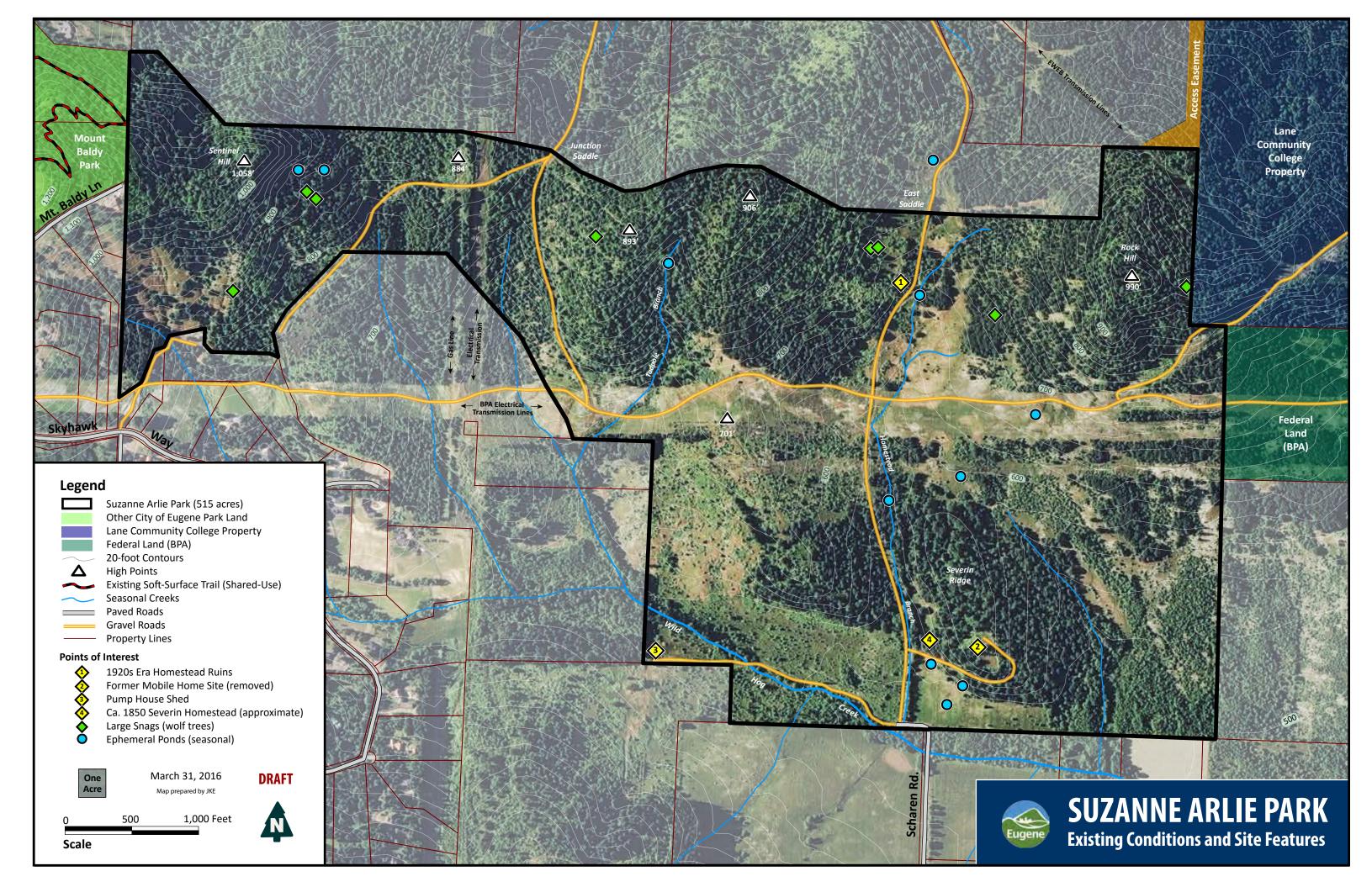
The remains of an outbuilding located near the chimney



Abandoned lap-sided pump house

A few additional structures can be observed on the 1936 aerial photo including a small cluster of buildings along the

road just to the north of the site and what looks like a small barn or out-building just to the north of Severin Ridge. No surface evidence of these structures remain today. Lastly, a manufactured home was located on top of the small hill south side of the park for a short time in the mid-1990s. This structure was in poor condition when the City purchased the property and removed shortly thereafter.



#### 2.2 Landform and Hydrology

#### 2.2.1 Topography

The northern boundary of the park generally runs along a ridgeline (Goshen Ridge) that extends eastward from Mount Baldy. This ridge, which separates the Russel Creek watershed to the north and Wild Hog Creek watershed to the south, includes several high points or hilltops with elevations of (from west to east) 1,058 feet, 884 feet, 893 feet, 906 feet, and 990 feet (see *Existing Site Features and Conditions Map*). The westernmost hilltop is referred to as Sentinel Hill because it overlooks the future Ridgeline Trail approach into the park. The easternmost hilltop is referred to as Rock Hill due to the presence of several exposed rock formations near the summit and numerous rocks and boulders on its flanks. The main body of the park drops away from this ridgetop toward the south in a series of rolling ridges and small drainages. Slopes in this area of the site generally have slopes ranging from approximately 15 to 50 percent. The steepest slope is located below east side of Sentinel Hill and appears to be an area of past landslide activity. The slope of the park gradually lessons as the topography drops to the south toward the nearly flat alluvial plain of Wild Hog Creek where average slopes are less than to one percent in places. The flat topography in this area, combined with heavy clay soils, results in poor drainage and standing water is present over much of this area during the rainy season. The lowest elevation located on the very southeast corner of the park and is about 500 feet.



The full 1.5-mile west-east extent of Suzanne Arlie Park can be viewed from an area just to the south of the park.



The southern edge of the park is generally very flat (wet prairie with Severin Ridge in background).



The landform across much of the park consists of a series of ridges and rolling hills.

#### 2.2.2 Geological Features

Suzanne Arlie Park and the surrounding area contains a highly diverse mix of geologic features including older marine sedimentary rock, basaltic formations, and more recent alluvial and landslide deposits. The marine sediments, known as the Eugene formation, were laid down over a period of several million years and rock containing shell fossils can be found in some areas of the park. In many areas of the site, intrusive basaltic rock pushed up into the Eugene formation over an extended period of time and has been exposed through erosion in several spots across the park, particularly along Goshen Ridge and on Rock Hill. In more recent geologic times, Wild Hog Creek has laid down extensive deposits of alluvium and continues to do so today, with the creek gradually cutting away at the Eugene Formation to the north of the Creek including Severin Ridge. Evidence of landslides and landslide deposits can be found in several areas of the park including the east of Sentinel Hill and around Rock Hill.

Figure 2-2: Geologic Map Units

Geologic Map Unit Name	Origin	Age	Acres
Basaltic/Basaltic Andesite	Volcanic	Oligocene/Miocene (~5-34 million years)	8.9
Basaltic Intrusive Rocks	Intrusive rock	Oligocene/Miocene (~5-34 million years)	44.7
Eugene Formation	Marine sediment	Eocene/Oligocene (~33-36 million years)	273.2
Fine Graveled Alluvium	Sediments	Recent	51.4
Fisher Formation	Volcaniclastic rocks	Eocene/Oligocene (~23-56 million years)	129.6
Landslide Deposits	Mixed grained	Holocene and Pleistocene (~2 million	7.5
	sediments	years to recent)	

Source: Oregon Department of Geology and Mineral Industries

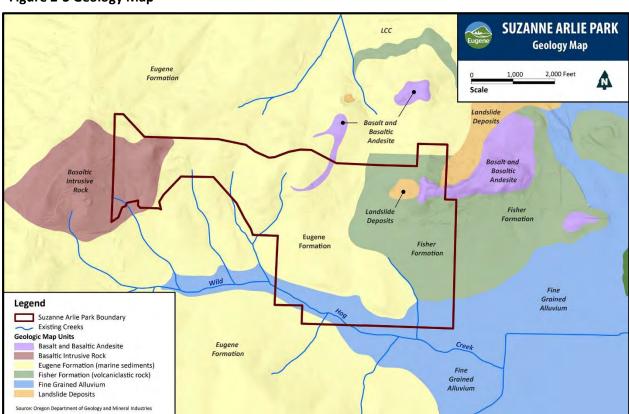


Figure 2-3 Geology Map





Exposed basalt on the slope of Rock Hill

Shell fossils in Eugene Formation near Severin Ridge

#### 2.2.3 Soils

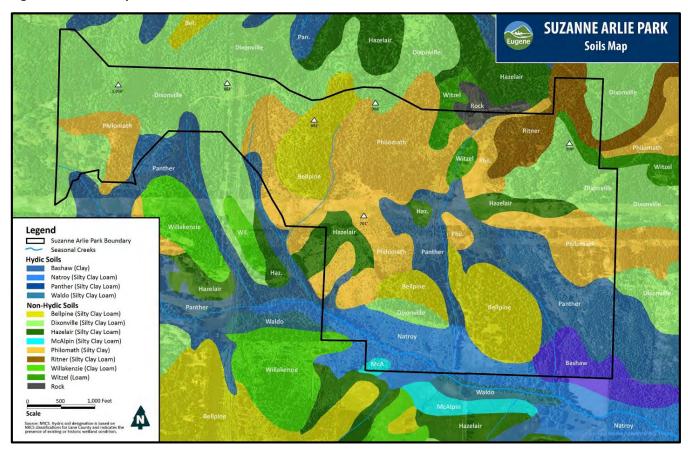
Based on U.S. Natural Resources Conservation Service (NRCS) data, Suzanne Arlie Park contains a very complex mix of soils with a total of thirteen mapped soil units present. This is a result of the complex geology and topographic variation found on the site. As this data relates to the Master Plan, the key distinction is whether NRCS has classified the soil as "hydric" or "non-hydric". Hydric soils are poorly drained, indicate the historic or current presence of wetland conditions, and are very difficult and expensive to develop recreational facilities on. The park contains four soil types that are classified as hydric totaling 123 acres, all located on the southern half of the site and are associated with Wild Hog Creek and its tributaries (see Soils Map with blue tones indicating hydric soils). The remaining 329 acres of the park contains soils classified as non-hydric including approximately 5 acres mapped as "rock" near the ridgetop (see Soils Map). Although not mapped as such, there are likely hydric inclusions within some areas of the non-hydric map units.

Figure 2-4: Soil Types

1.84 = 1. 22 1/6.2	
Soil Type by Hydrologic Classification	Area
Hydric Soils (indicates existing or past wetland conditions)	123 acres
Bashaw, Natroy, Panther, Waldo	
Non-Hydric Soils (upland soils)	329 acres
Bellpin, Dixonville, Hazelair, McAlpin, Philomath, Ritner, Willakenzie,	
Witzel, Rock	

Source: Natural Resources Conservation Service

Figure 2-5 Soils Map



#### 2.2.4 Surface Hydrology and Wetlands

The main ridgeline that runs along the northern edge of Suzanne Arlie Park is the break point between two small watersheds, both which eventually drain directly into the Willamette River to the east. Approximately 55 acres of the park drains northward into the Russel Creek basin. while the remainder of the site drains south southward into the Wild Hog Creek basin. There are no perennial creeks within the park and even the largest, Wild Hog Creek, is typically dry by midsummer. Although a formal wetland delineation has not been conducted for the park, based on the presence of hydric soils and observed seasonal hydrology, approximately 130 acres of the site are wetland. The largest concentrations are found in the flatter areas around Wild Hog Creek and its tributaries. These wetlands are seasonal with standing and flowing water up to one-foot in depth present during the wet season, typically becoming dry by late spring (May or June).



Homestead Branch of Wild Hog Creek

Additional wetland areas can be found along some of the drainages that cross the site and are often lined with willow thickets. Finally, several shallow ephemeral ponds can also be found in the park (see **Existing Site Features and** Conditions Map). Some of these small seasonal ponds were created through natural processes, but most were created over the last century by human activities. The western most ponds located at the base of Sentinel Hill appear to have formed behind landslide deposits landslide deposits. A pond located on the "Tadpole Branch" of Wild Hog Creek formed behind a



Wetland prairie in the flat southern edge of the park

logging road which blocks flow in the creek. Two small ponded areas are located along the "Homestead Branch" of Wild Hog Creek and were likely dug by early settlers to provide water for livestock. The remaining ponds are all small and are likely former stock ponds dating back to the time when livestock grazed the site. Regardless of their origin or size, these ponds all likely provide important habitat for the life cycle of native amphibians such as the northern red-legged frog, the pacific treefrog, Nortwestern salamanders, and long-toed salamander. The seasonality of these ponds prevents non-native bull frogs from establishing.



This small pond located along the Tadpole Branch of Wild Hog Creek is an example of several ephemeral ponds within the park. These seasonal ponds provide outstanding habitat for native amphibians.

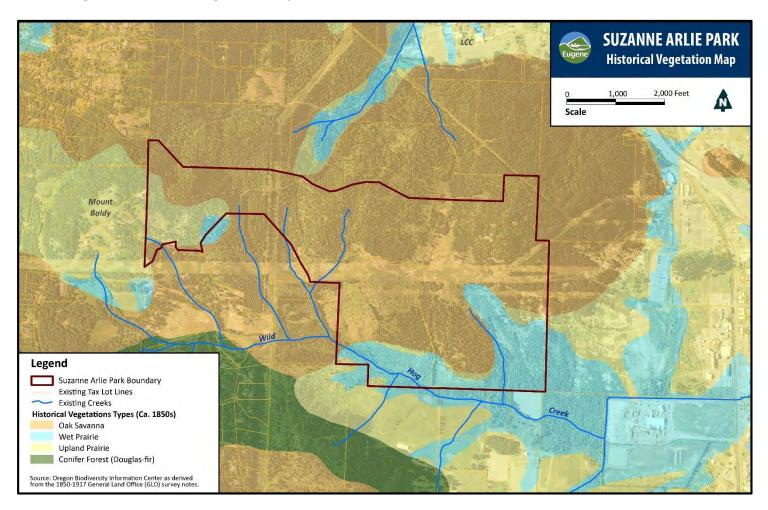
#### 2.3 Vegetation and Wildlife

#### 2.3.1 Historical Vegetation Patterns

The General Land Office (GLO) survey notes of the 1850s provide the best available record of the presettlement vegetation patterns for the Willamette Valley. The federal government commissioned these surveys which recorded general vegetation communities and other significant features present at the time. These maps were translated into digital map format in the 1990s. At the time of the Willamette Valley GLO surveys, the native plant communities were presumably grazed to some extent by freeranging livestock brought in by early settlers, but otherwise largely undisturbed through other human activities such as road building, drainage, tilling, or urban development (Christy et al. 2011). POSSIBLY ADD GLO SURVEY MAP

The GLO map data indicates the area that is today Suzanne Arlie Park and much of the surrounding lands were historically dominated by a very open landscape consisting of oak savanna, wet prairie, and upland prairie (see Historical Vegetation Map). Wetland and upland prairie can be differentiated by the dominant grass species noted on the land surveys. Roemer's fescue (*Festuca roemeri*) generally indicated the presence of an upland prairie plant community and tufted hairgrass (*Deschampsia cespitosa*) indicated the presence of a wet prairie plant community.

**Figure 2-6 Historical Vegetation Map** 

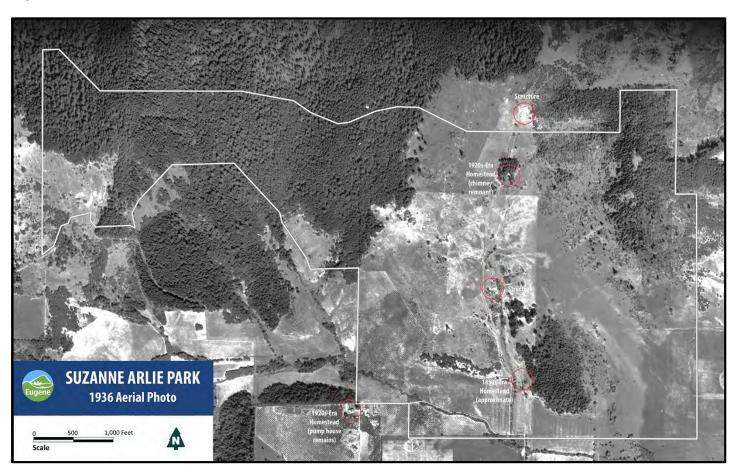


#### 2.3.2 Interpretation of Historical Aerial Photos

Historical aerial photos can be useful for documenting development patterns and changes in vegetation communities over time. A sequence of historical aerial photos can be found Appendix A.

1936: The earliest known aerial photo of the area was flown in August of 1936. This photo shows much of the western half of the site in a wooded or forested condition with the exceptions of two patches of open savanna. The eastern half of the site is in a more open condition and shows signs of settlement and agricultural activities including newly planted orchards and numerous livestock trails indicating regular grazing. Woodland and savanna conditions are present on the hill in the northeast corner of the site and on the smaller hill near the southern edge of the site. A road is seen running north-south through the entire site and a second runs parallel to Wild Hog Creek (both present today). Several structures are evident along this north-south road. A long narrow building, most likely a barn, and another smaller structure can be seen just to the north of the current park boundary. A grove of trees can be seen in the location of the homestead remains (chimney), although the house is not visible on the aerial photo. It is possible that it is still standing at this point, but hidden within the trees. Another small structure can be seen on the east side of the road, just north of the small hill. There is no evidence of the 1850s era homestead on the photo. Another 1920s era homestead located just to the southwest of the site is visible and clearly occupied at this time.

Figure 2-7: 1936 Aerial Photo



1960: This aerial photo depicts a very similar pattern of vegetation and land uses to what was observed in the 1936 aerial photo, with the exception of some expansion of the woodland on the northern edge of the site and a cleared BPA power corridor running east-west. An additional road is shown accessing the site from the north near where a gravel road exists today.

<u>1968</u>: This aerial photo reveals additional areas of clearing for new transmission lines and a gas line (north-south). The south orchards appear to have been converted to pasture. Evidence of a recent logging operation and associated logging roads are seen across the northwestern portion of the site. Much of the conifer cover appears to have been removed and many of the deciduous trees (oaks) left standing.

<u>1979</u>: This aerial photo shows much of the logged area has reforested and tree and shrub cover (presumably blackberry, Scotch broom, hawthorn, and pear) encroaching into some of the pastures, which could indicate that grazing had been curtailed.

<u>2000</u>: This aerial photo shows that much of the central portion of the site had been logged again and tree and shrub growth continued to expand into many of the open areas that were formerly in agricultural use. Several large patches of invasive Scotch broom can be seen in full flower. A manufactured home is shown on top of Severin Ridge on the south side of the site (now removed) along with an associated access road.

#### 2.3.3 Existing Vegetation Communities

Note: This section will be revised and supplemented upon completion of a vegetation survey currently being conducted by Salix Associates, which will be complete in fall 2016.

Suzanne Arlie Park contains a diverse mosaic of vegetation communities, which can be generalized under the twelve general categories listed below. The vegetation categories or classifications were derived from a number of sources including: The *Nature Conservancy's Willamette* Valley-Puget Trough-Georgia Basin Ecoregional Assessment (TNC, 2004), and the *Oregon* Conservation Strategy (ODFW, 2006), and the Eastern Ridgeline Extension Habitat Assessment (Salix Associates 2009). A range of onthe-ground conditions exist within each of these vegetation polygons, which are detailed in the 2009 and 2016 Salix Associates habitat assessment report (see Appendix B).



The park includes a diverse mix of vegetation communities including prairie, savanna, oak woodland, and conifer forest, all pictured in this view toward Rock Hill.

The most common vegetation community currently found on the site is shrubland, covering nearly half of the site. Shrubland generally consists of former pasture or forest land that has become overgrown with mostly non-native trees and shrubs. The next most common vegetation communities include oak woodland, and oak-conifer woodland, and oak-conifer forest. The location of these vegetation communities is shown on the *Existing Vegetation Communities Map* and itemized by acreage and percent cover in Figure 2-7 below.

Figure 2-8: Existing Vegetation Communities and Cover

(Note: data will be updated when available in fall 2016)

<b>Existing Vegetation Communities</b>	Canopy Cover	Approximate Acreage	% of Total Acreage
Upland Prairie	0-5%	21.8	4.2 %
Wetland Prairie	0-5%	10.2	2.0 %
Maintained Utility Easements*	variable	32.0	6.2 %
Savanna	6-30%	29.5	5.7 %
Oak Woodland	31-70%	60.6	11.8 %
Shrubland (upland and wetland)	variable	245.4	47.6 %
Maple-Conifer Woodland	31-70%	10.7	2.1 %
Oak-Conifer Woodland	31-70%	69.3	13.4 %
Oak-Conifer Forest	71-100%	5.5	1.1 %
Maple-Conifer Forest	71-100%	14.8	2.9 %
Riparian Woodland/Forest	31-100%	5.2	1.0 %
Conifer Forest	71-100%	1.9	0.4 %
Gravel Roads**	none	8.4	1.6 %
Total	-	515.3	100 %

<sup>\*</sup> Utility easements maintained to limit tree and shrub growth for access for maintenance and emergency repairs along electrical transmission lines and a buried gas line. Most of these corridors also include gravel roads and gravel maintenance pads.

<u>Upland Prairie and Wetland Prairie</u>: Covering approximately 32.0 acres combined, wetland and upland prairie are found in several patches, mainly on the eastern side of the site. Prairies (grasslands) are defined as areas that contain a tree or shrub canopy of less than 5%, with scattered woody vegetation present in some areas. The existing wetland prairie area is located on poorly drained hydric soils on the flatter southern edge of the site. All of the prairie areas were used for grazing over an extended period and are dominated by non-native pasture grasses including... (Include 2016 vegetation data when available).

<u>Oak Savanna</u>: Oak savanna, which by definition has a tree canopy ranging from 6 to 30 percent cover, is present on approximately 30 acres. These areas contain widely scattered Oregon white oak (*Quercus garryana*). The savanna understory consists mainly of non-native pasture grasses and forbs, similar in composition to the site's upland prairie areas... (Include 2016 vegetation data when available)

<sup>\*\*</sup> The tally only includes gravel roads outside of the utility easements.

<u>Oak Woodland</u>: Oak woodland is present on approximately 60.6 acres, mainly on the slopes of Rock Hill along with some other smaller patches. Woodland is defined as having a canopy of between 31 and 70% which allows some light to reach the understory. Oregon white oak is the dominant tree species in these areas, with smaller quantities of California black oak (*Quercus kelloggii*) and ponderosa pine (*Pinus ponderosa*) intermixed. Douglas-fir has generally not established in most of the areas of the site currently categorized as oak woodland. Although the understory in these areas is dominated by nonnative pasture grasses and forbs, some native shrubs, grasses, and forbs are present... (Include 2016 vegetation data when available)

<u>Maintained Utility Easements</u>: Covering approximately 32.0 acres of land running in numerous strips across the site, these areas contain vegetation that is in a constant state of succession, with regular utility maintenance practices aimed at controlling the establishment of woody vegetation. Some of these corridors contain vegetation similar to that found in the prairie areas and other areas are more similar to the shrubland community. Non-native grasses, forbs, and shrubs tend to dominate these areas... (Include 2016 vegetation data when available)

<u>Shrub</u>: This vegetation community covers approximately 245 acres of the site and is categorized as a transitional habitat where woody vegetation has become established within former pastures or logged areas. Invasive non-native trees and shrubs such as Armenian blackberry (*Rubus vestitus*), Scotch broom (*Cytisus scoparius*), English and Sukdorf's hawthorn (*Crataegus monogyna* and *suksdorfii*), and domestic pear (*Pyrus communis*) are common in these areas... (Include 2016 vegetation data when available)

<u>Maple-Conifer Woodland</u>: These areas are mainly located in patches on the western side of the site on the slopes around Sentinel Hill covering approximately 11 acres with a canopy consisting mainly of Douglas-fir, bigleaf maple (Acer macrophyllum), and vine maple with some openings... (Include 2016 vegetation data when available)

<u>Oak-Conifer Woodland</u>: These areas are primarily located on and around Severin Hill and to the south of Rock Hill, totaling approximately 69 acres. These areas contain have a canopy dominated by a mix of oak and Douglas-fir with some openings... (Include 2016 vegetation data when available)

<u>Oak-Conifer Forest</u>: These areas cover approximately 6 acres in the western end of the site and are similar in composition to the Oak-Conifer Woodland, but with a denser more closed canopy. Forest is defined as having a canopy of between 71 and 100% which allows very limited direct sunlight to reach the understory. ... (Include 2016 vegetation data when available)

<u>Maple-Conifer Forest</u>: These areas are located on approximately 15 acres in the western portion of the site and are similar to the Oak-Conifer Woodland, but with a denser more closed canopy... (Include 2016 vegetation data when available)

<u>Riparian Forest/Woodland</u>: Mixed riparian forest and riparian woodland covering approximately 5 acres is found in a narrow band of vegetation located along Wild Hog Creek. Dominant vegetation includes... (Include 2016 vegetation data when available)

<u>Conifer Forest</u>: A small mapped patch of conifer forest is located near the top of Rock Hill, dominated mainly by Douglas-fir (*Pseudotsuga menziesii*) and vine maple (*Acer circinatum*) ... (Include 2016 vegetation data when available)

Wetland prairie on south edge of property with woody vegetation colonizing



Upland prairie patch on the upper slopes of Rock Hill



Oak savanna near the center of the park



Oak woodland on the southwest facing slope of Rock Hill

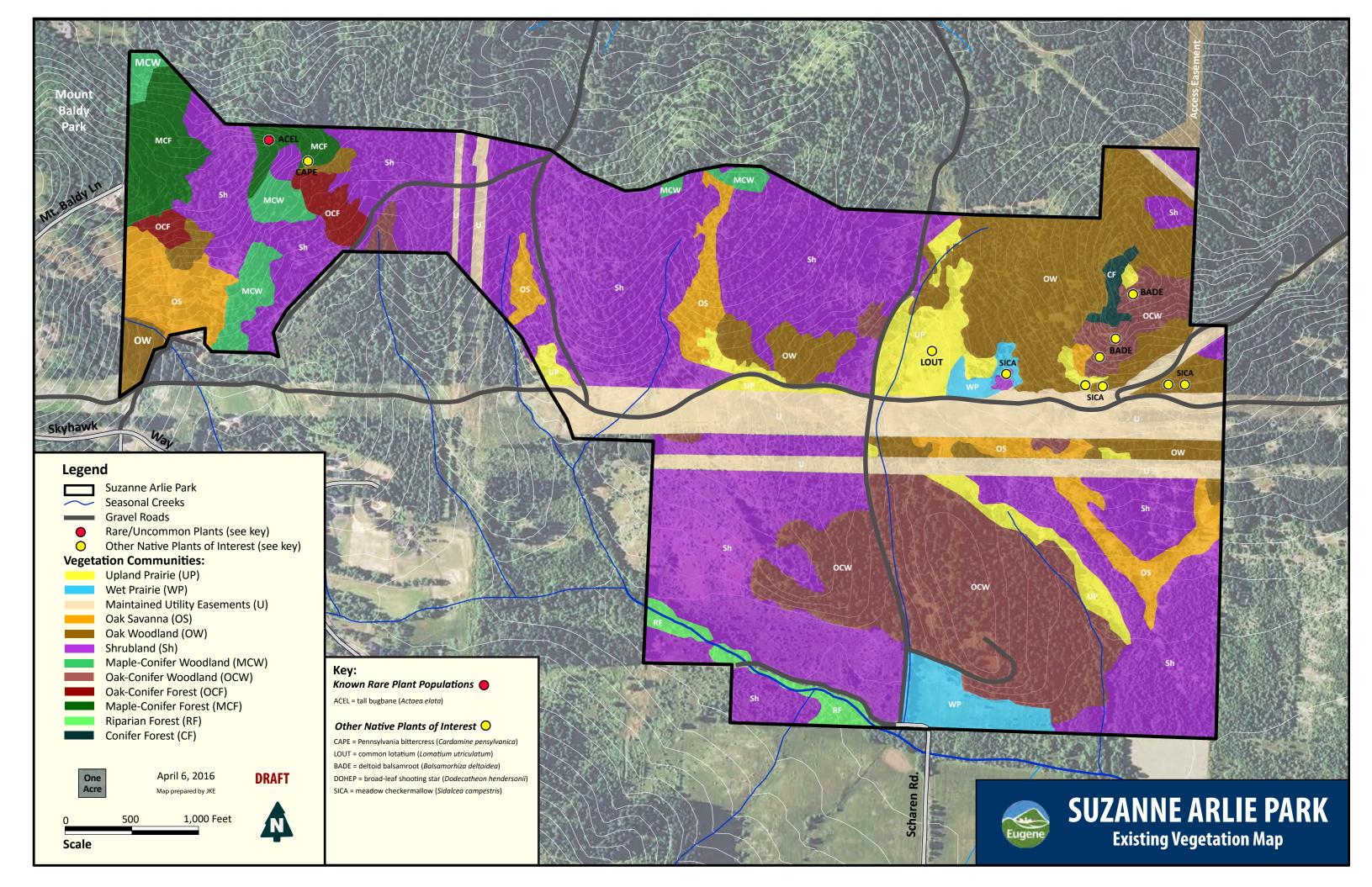


Mixed conifer woodland located just to the west of Junction Saddle



Mixed conifer forest located on the west slope of sentinel Hill





#### 2.3.4 Ecological Significance

Within the broader Willamette Valley, Suzanne Arlie Park is considered a priority site for habitat conservation due to its size, proximity to other conserved natural areas, and the fact that it contains a number of vegetation communities that have been identified in the **Oregon Conservation Strategy** (ODFW, 2006) as high priority conservation targets ("strategy habitats"). These habitats include oak woodland, grassland (including savanna), wetland, riparian, and aquatic.

Additionally, the park is fully contained within an area defined **Synthesis Conservation** Opportunity Area (COA) by The Nature Conservancy (TNC). This mapping effort began in 2005 when TNC combined a total of six existing Willamette Valley conservation assessments into a single Union Portfolio, depicting locations of key habitats within the Willamette Valley. In 2014, TNC further refined these COA boundaries based on up-to-date conservation data. The defined COAs within the Willamette Valley ecoregion are shown on the map to the right and Suzanne Arlie Park is highlighted with a red circle.

Implementing conservation and restoration activities at the landscape scale on Suzanne Arlie Park will afford great opportunities to address the broader conservation objectives for the valley.

Figure 2-10: Synthesis Conservation Opportunity Area Map



#### 2.3.5 Rare and Uncommon Plant Communities

Note: This section will be developed upon completion of a vegetation survey currently being conducted by Salix Associates, which will be complete in fall 2016.

#### 2.3.6 Invasive Exotic Vegetation

Note: This section will be developed upon completion of a vegetation survey currently being conducted by Salix Associates, which will be complete in fall 2016.

Long-term site disturbances through grazing, farming, and logging followed by several decades of very limited vegetation management have contributed to the fact that many of the site's habitats are dominated by non-native and often invasive plant species... (Include 2016 vegetation data when available).

#### 2.3.7 Observed Wildlife

Note: This section will be developed upon completion of a vegetation survey currently being conducted by Salix Associates, which will be complete in fall 2016.

As a result of the wide range of habitat conditions, a diverse assemblage of wildlife species likely occurs at Suzanne Arlie Park and more comprehensive wildlife surveys will be scheduled in the future. The following noteworthy sightings of native wildlife have been recorded on the site since it was acquired by the City:

- Black-tailed deer
- Bobcat (captured by trail camera on several occasions)
- Common gray fox (captured by trail camera on several occasions)
- Black bear (scat observed on several occasions)
- Fox (captured by trail camera on several occasions)
- Red-spotted Garter Snake
- Western gray squirrel

Observations of non-native wildlife include:

- Wild turkey
- European starling

#### 2.3.7 Unique Habitat Features

In addition to a mosaic of native vegetation communities, a number of unique habitat features are present on the site. Of particular value are a number of shallow ephemeral ponds present (see Existing Site Features and Conditions Map). Some of these small seasonal ponds were created through natural processes, but most were created over the last century by human activities. Regardless of their origin or size, these ponds all likely provide important habitat for the life cycle of native amphibians. The seasonality of these ponds prevents non-native bull frogs from establishing. Additionally, a number of large open Ephemeral pond near the southern edge of the park grown Douglas-fir trees can be found across the site and provide excellent



Ephemeral pond near the southern edge of the park

perching and nesting habitat for birds including red-tailed hawk and pileated woodpecker. These trees, which tend to tower above the adjacent vegetation, initially established in an open condition so have many branches and limbs. These trees, sometimes referred to as "wolf trees", did not produce good timber due to the number of knots, so were often passed-over during logging operations.





Examples of large open-grown Douglas-fir trees, known as "wolf trees", found in Suzanne Arlie Park

#### 2.4 Planning Context and Easements

#### 2.4.2 Planning Context and Lane County Zoning

The full extent of Suzanne Arlie Park lies outside of Eugene's current Urban Growth Boundary (UGB). Due to its location outside of the UGB and city limits, Lane County zoning code currently applies to the land within the park. The majority of the park is zoned F1: Non-impacted Forest, with a smaller area zoned F-2: Impacted Forest (see Zoning and Plan Boundaries Map). The primary difference between these forest zones is that no new dwellings are allowed on F1 zoned lands whereas they could be permitted under F-2 zoning under certain circumstances. All lands immediately adjacent to the park are also governed by the Lane County zoning code and include lands zoned E-40 and E-25: Exclusive Farm Use to the north and south, F-2: Impacted Forest to the north, and RR5-NRES: Rural Residential to the south and west. Urban development in the area around the park will likely be very limited in the coming years due to rural zoning limitations and location outside of the UGB.

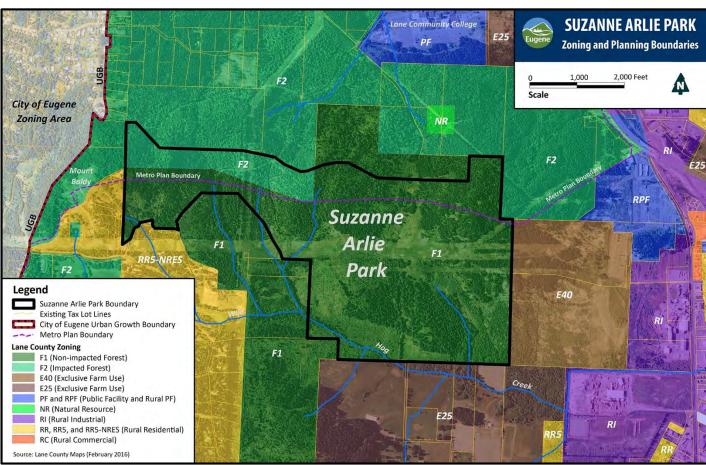


Figure 2-11: Zoning and Planning Boundaries Map

#### 2.4.1 Easements

There are two general types of easements associated with Suzanne Arlie Park. A summary of what is permitted within these easements is listed below, but the original easement agreement should be consulted for detail.

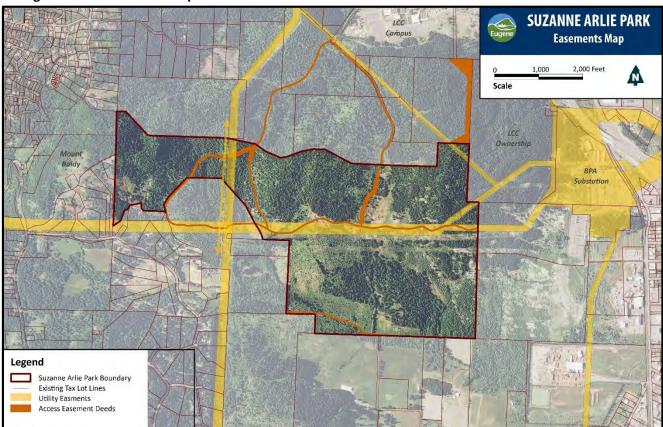
<u>Access Easements</u>: A series of access easements are in place along the roads that provide access to or are located on the site. Generally speaking, these easement agreements allow both the City and the owner of the properties to the north (formerly Arlie & Company) permanent access onto these roads for City management access and for access to privately owned lands which may be developed in the future. Additionally, the City holds an access easement along a narrow band that connects the area between the park and the upper parking lot of Lane Community College for a possible future trail connection.

**Utility Easements:** An extensive series of utility easements cross the site to accommodate BPA and EWEB electrical transmission lines along with a gas utility line that runs north-south across the park. Under these easement agreements, the various utilities are permitted to access the park in order to maintain their infrastructure as needed. Maintenance activities typically involves periodic removal of trees and other woody vegetation, road repair, and replacement and maintenance of



Utility easements are a prominent feature in the park

Figure 2-12: Easements Map



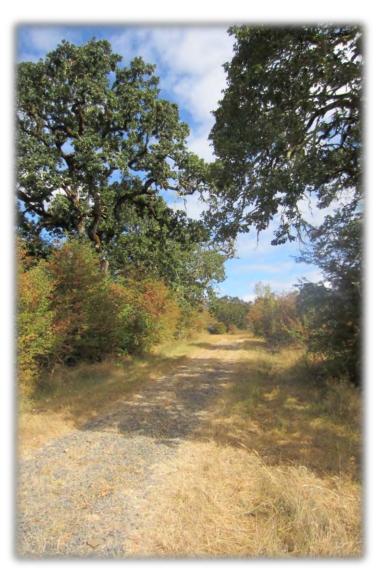
utility lines and underground gas lines. Generally speaking, non-structural park facilities such as trails and parking areas are permitted within these easement areas, but permanent structures are not.

#### 2.5 Access, Roads, and Utilities

#### 2.5.1 Roads and Access Points

There are currently three primary road access points into Suzanne Arlie Park, all of which the City is legally able to use to for management activities. From the south, access can be gained directly from the end of Scharen Road which runs to the park boundary on public right-of-way. From the north, there are two access roads that extend into the park, both originating at Gonyea Road near Lane Community College. These two gravel roads split shortly after leaving the paved portion of Gonyea Road and both cross privately owned land for approximately two-thirds of a mile before entering the park at two points (Homestead Saddle and Junction Saddle) approximately a half mile apart. Use of these roads is permitted through easements established with the private land owner that allows the City to access the park for management activities. These roads are graveled and facilitate all-season access to the park. After entering the park, the easternmost road continues straight to the south where and intersects the BPA powerline road and then Scharen Road. The westernmost road enters the park and then splits, extending to the southwest before leaving the property (the lower portion of this road is seasonal) and to the southeast as an all-season road where it intersects with the BPA powerline road.

The powerline road extends east-west through much of the park and was re-graveled by BPA in 2014 to allow for all-season access. On the



The main north-south access road, which dates back to the early settlement of the area

southern end of the park, an all-season road extends to the top of Severin Hill and another road runs parallel to Wild Hog Creek. The Wild Hog Creek road is not readily passable during the wet season. In total, approximately 14,500 linear feet of all-season roadway and 2,300 linear feet of seasonal roadway are located within the park boundary.

#### 2.6.3 Utilities

There is currently no electrical, water, or other utilities that serve the park. There is evidence that electricity was once extended into the northern homestead (chimney remains) and the mobile home at the top of the small hill. The mobile home was served by a well. As described earlier, major BPA electrical transmission lines cross the site in several locations and an EWEB transmission line cuts across the northwest corner of the park. These transmission lines are carried by a combination of large steel lattice structures and wood poles which are highly visible features within the park. Additionally, a buried gas line runs across the western portion of the park.



Most of the utility easements contain all-season roads which can accommodate both maintenance and recreational access.

#### 2.6 Recently Completed Site Management Actions

Since acquisition of Suzanne Arlie Park, the City's has primarily focused on management efforts related to invasive species control, improvements for maintenance access, debris removal, installation of boundary markers, and fuels reduction efforts to lower the risk of wildfire. In 2015, the City utilized available federal funding to embark on a major fuels reduction effort in several natural area parks including the treatment of 122 acres within the park. This effort including mowing and cutting non-native trees (pear, cherry, and hawthorn) and shrubs (blackberry and Scotch broom) and thinning conifers and other trees in oak habitats. This fuels reduction effort will continue into 2016.



Contractor removing non-native vegetation from a prairie